

Date: Wed, 28 Jul 93 00:44:30 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #910  
To: Info-Hams

Info-Hams Digest                      Wed, 28 Jul 93                      Volume 93 : Issue    910

Today's Topics:

                    ARRL Internet connection  
                    Commercial Licenses?  
Computer based quizer for almost-tech?  
                    Fixing the books  
                    FT109RH For Sale  
                    help wanted w/ homebrew TX  
                    historic question  
How many people actually use paddles ?  
                    ICOM Service Warrantee?  
                    INFO-HAMS address  
KC0Q/N0II CMOS SuperKeyer II - Manual?  
                    MFJ #1796 Vertical Antenna  
Opinions wanted: DJ-580 vs. FT-530 (2 msgs)  
                    Schematic for RFC 2-317 wanted...  
                    TS50 Illegal!

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Tue, 27 Jul 1993 19:52:55 GMT  
From: pacbell.com!att-out!cbfsb!cbnews!cbnewst!cbnewsm!  
gdo%aloft.att.com@network.ucsd.edu  
Subject: ARRL Internet connection  
To: info-hams@ucsd.edu

In article <1823@arrl.org>, jbbloom@arrl.org (Jon Bloom, KE3Z) writes:  
> In rec.radio.amateur.misc, jherndo@eis.calstate.edu (John Herndon) writes:

|> >Well, stop taking it out of "the back pockets" of ARRL members. As quite  
|> >a few of us have seen, the ARRL is now connected to the Internet. Drop  
|> >the DIRECT connection, and save several thousand dollars a month.  
|>  
|> In fact, we pay something in the neighborhood of \$2000 \*per year\* for  
|> our dial-up connection. \*I\* feel that the additional service we are  
|> able to provide to our members is more than worth that amount.  
|>

I, for one, applaud the ARRL for connecting to the Internet. I find it to be  
an extremely useful forum for communicating with them. The folks from the  
ARRL are also active participants in the discussions on "the net" as they  
should be.

I don't always agree with the ARRL positions (God, that would be boring :-)),  
but let's cut 'em a break. Being a voice that speaks for the majority of the  
amateur masses, the ARRL deserves to have a reliable Internet connection.  
After all, isn't one purpose of the Amateur Radio Service to promote technical  
innovation? This IS the 1990's and the ARRL belongs here.

Lord, forgive me, for I have added fuel to yet another flame war! I do,  
however, believe that most will agree with me.

--

Glenn D. O'Donnell, N3BDA	Internet: gdo@aloft.att.com
AT&T Bell Laboratories	Packet: n3bda@n3dpu.pa.usa.na
Allentown, PA	

-----  
Date: Tue, 27 Jul 93 23:03:59 GMT  
From: unix.sri.com!headwall.Stanford.EDU!nntp.Stanford.EDU!umunhum!  
paulf@hplabs.hpl.hp.com  
Subject: Commercial Licenses?  
To: info-hams@ucsd.edu

Does anyone know when the FCC or proxy will resume commercial license exams?

--

-=>Paul Flaherty, N9FZX | "The National Anthem has become The Whine."  
->paulf@Stanford.EDU | -- Charles Sykes, \_A Nation of Victims\_

-----  
Date: Tue, 27 Jul 1993 19:24:02 GMT  
From: spool.mu.edu!uwm.edu!linac!att!cbnewsm!hellman@decwrl.dec.com

Subject: Computer based quizer for almost-tech?  
To: info-hams@ucsd.edu

In article <CAsz2w.82J@rahul.net>, bromgrev@rahul.net (Carl A. Merritt) writes:

> I've seen a program for the Mac that has the full pool of questions for  
> a tech license and puts together fake test and grades you and the like...  
> Is there one out there for OS/2 or DOS on an Intel box?  
> Is there a good FTP site where I could find this? If not, could someone  
> be a real sport and FTP it into rahoul.net in /pub/bromgrev?  
> Txx.  
>  
>  
> --  
> Carl A. Merritt <bromgrev@rahul.net>

Carl: look for "autoexam" at ftp sites. (don't know if the pool  
questions in the pgm have been changed to the new ones)  
Shel WA2UBK

-----  
Date: Tue, 27 Jul 1993 17:44:22 GMT  
From: psinntp!laidbak!tellab5!carlson@uunet.uu.net  
Subject: Fixing the books  
To: info-hams@ucsd.edu

Since you cannot run for Division Director, perhaps you should  
run for Section Manager. It would give you some valuable experience  
in what it's like to have a position of responsibility in the  
ARRL Field Organization. A word of caution though - people will  
expect you to do something besides complain.

BTW, I have been an ARRL member for many more than 4 years, and  
I'm still capable of disagreeing with Headquarters.

Dave AA9D  
carlson@tellabs.com

-----  
Date: 28 Jul 93 01:39:27 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: FT109RH For Sale  
To: info-hams@ucsd.edu

For Sale

Yaesu FT109RH (220 MHZ.)  
CTCSS Encode/Decode  
MH-18A2B Speaker Mic  
Two FNB-4 Batteries 1  
Leather Case  
NC-15 Desktop Charger 2  
All this for \$250.00 + shipping if necessary.

Not sold separately. All items sold As Is.  
1 The batteries are old.  
2 Has a dirty switch.

Day 408 975 2057, FAX 408 975 2056, Evening 408 732 2483  
--  
Michael mbothe@netcom.com

"Only you can prevent forest fires". A well known bear.

-----  
Date: Tue, 27 Jul 93 12:50:33 GMT  
From: mercury.hsi.com!a3bee2!cyphyn!randy@uunet.uu.net  
Subject: help wanted w/ homebrew TX  
To: info-hams@ucsd.edu

furr@pilot.njin.net (Grover Furr) writes:

:  
: I'd like to look into building a homebrew transmitter and receiver. It  
: could be a very basic one, from a 50-year-old design. I think I'd  
: learn better what really makes them work.  
:  
: Is there a group of hams who do this kind of thing? and who would  
: provide encouragement? Either a group organized around building stuff  
: (simple), or around building/restoring old radios?  
:  
: I've been thinking about this for a long time, but have been inspired  
: by an article in the latest QST about a veteran ham who did it.  
: However, HE knew how!  
:  
: Failing a group, then, a book with step-by-step instructions for a  
: simple TX (even a very old book) would be welcome.  
:  
: Please email replies to:  
:  
:     furr@saturn.montclair.edu  
:  
: or post to the group. And thanks.

:  
:  
: \* \* \* \* \*  
: Grover C. Furr  
:  
I sent email but in case it fails, I'll be here.

--  
Randy KA1UNW                      If you get a shock while  
                                 servicing your equipment,                      "Works for me!"  
                                 DON'T JUMP!                                      -Peter Keyes  
                                 You might break an expensive tube!

-----  
Date: 28 Jul 93 04:59:27 GMT  
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu  
Subject: historic question  
To: info-hams@ucsd.edu

In article <1855@arrl.org> bbattles@arrl.org (Brian Battles WS10) writes:

>  
>>During World War II, you could at least \*listen\*.  
>  
> Hmmm...my mother, who is 66, recalls her parents (Italian immigrants; I  
>don't recall if they were naturalized citizens) having to turn their  
>shortwave-capable broadcast receivers (which many were, at that time) to some  
>sort of official local confiscation agency for the duration. I wonder if that  
>was some kind of local/state regulation or if it applied to all (noncitizen?)  
>residents of the US? (BTW, my grandparents had six sons who fought in combat  
>during WWII; seems strange yet typical that a government agency would believe  
>that a couple who would have their children risk their lives to defend the US  
>could somehow compromise national security by listening to foreign radio  
>transmissions.)

Consider that Japanese-American citizens were confined to internment  
camps during the war, but their military age sons could be in the Army  
as combat troops. Wartime isn't necessarily fair time.

Gary

--  
Gary Coffman KE4ZV                      |      You make it,                      | gatech!wa4mei!ke4zv!gary  
Destructive Testing Systems |      we break it.                      | uunet!rsiatl!ke4zv!gary  
534 Shannon Way                      |      Guaranteed!                      | emory!kd4nc!ke4zv!gary  
Lawrenceville, GA 30244              |                                      |

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Date: 27 Jul 93 17:23:48 EST  
From: pravda.sdsc.edu!news.cerf.net!usc!howland.reston.ans.net!gatech!  
news.ans.net!malgudi.oar.net!uoft02.utoledo.edu!tulip!mohan@network.ucsd.edu  
Subject: How many people actually use paddles ?  
To: info-hams@ucsd.edu

Hello,  
How much percentage of cw operators use paddles?  
I want to work on cw when my license (finally) gets here.  
Is it difficult to learn to send with the paddle/keyer combos?  
And my understanding is that paddles are expensive? Can someone with experience  
suggest a few paddles in different price ranges?  
Thanks :)  
--mohan/Waiting...

=====

+ Mohanakrishna Pakkurti	+ mohan@jupiter.cse.utoledo.edu	+
+ HOME: 2239 University Hills Blvd #204, Toledo OH 43606. Phone:(419)536-9073		+

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Date: 28 Jul 93 00:15:55 GMT  
From: ogicse!uwm.edu!spool.mu.edu!sgiblab!wattres!sking@network.ucsd.edu  
Subject: ICOM Service Warrantee?  
To: info-hams@ucsd.edu

Does anyone know if ICOM factory service has a warrantee on their  
work? I sent my IC-02AT in for service last year and the same problem  
popped up today. I can understand the first time since I didn't know  
how well the HT was treated before I got it (used), but there's no  
excuse this time since I KNOW I treated it right.

73 de STeve

--  
Stephen King KC6WCH/4 (QTH: EL89tq) "The buck stops here!"  
sking@wattres.sj.ca.us -- Harry S Truman  
KC6WCH @ K4DPZ.#GNVFL.FL.USA.NA "The buck never got here!"  
ICBM: 29N 41' 26" / 82W 21' 17" -- William Jefferson Blythe Clinton

-----  
Date: Tue, 27 Jul 1993 15:26:42 EDT  
From: mulvey!rich@uunet.uu.net  
Subject: INFO-HAMS address

To: info-hams@ucsd.edu

Hello!

Is there anybody out there who can tell me what mail address should be used when submitting articles to INFO-HAMS? I was asked by another user and will forward responses on to him.

Thanks!

- Rich

-----  
Date: Tue, 27 Jul 1993 14:35:32 GMT  
From: pravda.sdsc.edu!news.cerf.net!usc!news.isi.edu!gremlin!lava!  
domae@network.ucsd.edu  
Subject: KC0Q/N0II CMOS SuperKeyer II - Manual?  
To: info-hams@ucsd.edu

I'm looking around for the electronic copy of the manual for the KC0Q/N0II SuperKeyer II. I've sent for the chip (68HC705) and such, but would like to read more about it before hand.

Also, given the condition of the Midwest region (esp. Cedar Rapids IA) where the authors are from - I'm not going to expect anything for some time.

Thanks,

--

Terry Domae

Northrop Research Center		Phone/Fax: 310/544-5203 310/377-4271	
One Research Park		Internet: domae@nrtc.northrop.com	
Palos Verdes, CA, 90274-5471		Amateur Radio: KC6ROI	

-----  
Date: 26 Jul 93 15:06:44 -0500  
From: envoy.wl.com!reeve.research.aa.wl.com!aa.wl.com!downsd@decwrl.dec.com  
Subject: MFJ #1796 Vertical Antenna  
To: info-hams@ucsd.edu

Has anyone had experience with the MFJ #1796 vertical antenna? It looks like a good deal relative to an R7, but will it do everything claimed? They are selling like hotcakes, but I haven't seen a review yet.

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Date: Tue, 27 Jul 1993 21:17:48 GMT  
From: concert!news-feed-2.peachnet.edu!ukma!rsg1.er.usgs.gov!dgg.cr.usgs.gov!  
bodoh@decwrl.dec.com  
Subject: Opinions wanted: DJ-580 vs. FT-530  
To: info-hams@ucsd.edu

In article <233sur\$644@hub.ucsb.edu>, uznerk@mcl.ucsb.edu (Andrew Krenz) writes:

|> Subject pretty much says it all: While I'm sitting here waiting for the FCC  
|> to mail me my license, I'd like to gather some opinions as to which is the  
|> better dual bander for the money: the Alinco or the Yaesu.

|>  
|> A couple friends of mine have the Alinco DJ-580 and I'm pretty impressed  
|> with it. However, they say that they wish they had more memories, which  
|> I understand the Yaesu has. Is it worth the \$40-\$50 more for the Yaesu  
|> just to have more memories? Or are there other features present on the  
|> Yaesu that would justify the higher price.

|>  
|> Thanks in advance,

|> -AK

|>

|>

|> --

|> -----

|> Andrew Krenz -- uznerk@mcl.ucsb.edu | krenz@engrhub.ucsb.edu

|> -----

--

I have the ALinco 580 and like it, however it does have a slow scan rate of about 2 ch/sec and early models suffered from intermod. It also cannot do dual in-band receive.

I have heard that the Yaesu has dual in-band receive and more memory but I haven't heard about intermod or the scan rate. Both radios can be modified for wide receive and xmit although it takes about 5 minutes for the Alinco and apparently much longer for the Yaesu as you have to open it up. The 580 is set up so you remove the battery and then the base plate, snip two wires, then tape them (for safety), reassemble and reset. I believe that the receive and xmit ranges are similar. The Alinco is slightly narrower and easier to hold.

It was a toss up for me, but I've always liked the looks of the Alinco equipment and it was cheaper. I am anxiously awaiting the follow on to both radios - assuming that they keep packing in more goodies...

++++  
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0Y?? (in the mail) +  
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +



+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66)

+

+ "Welcome back my friends to the show that never ends!" EL&P

+

+++++

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Date: 28 Jul 93 04:49:08 GMT

From: ogicse!uwm.edu!spool.mu.edu!umn.edu!csus.edu!netcom.com!jfh@network.ucsd.edu

Subject: Opinions wanted: DJ-580 vs. FT-530

To: info-hams@ucsd.edu

uznerk@mcl.ucsb.edu (Andrew Krenz) wrote:

>A couple friends of mine have the Alinco DJ-580 and I'm pretty impressed  
>with it. HOwever, they say that they wish they had more memories, which  
>I understand the Yaesu has. Is it worth the \$40-\$50 more for the Yaesu  
>just to have more memories?

The price difference shouldn't be that large. I bought an FT-530 shortly  
after a friend bought a DJ-580, and they cost almost exactly the same  
amount.

If it's memories you're after, look at the Kenwood with the optional  
expanded memory. It's a little more expensive, but not much. I didn't get  
one only because I didn't think I would like its odd squelch/volume  
arrangement.

>Or are there other features present on the  
>Yaesu that would justify the higher price.

The Yaesu has a clock, and doesn't seem to get as hot transmitting. It  
also uses a slightly different plug arrangement from other Yaesu's, so some  
accessories (and also batteries) aren't exchangeable with other Yaesu  
radios. The scan rate is noticeably faster on the Yaesu.

--

-----  
Jack Hamilton      jfh@netcom.com      kd6ttl@n0ary.#nocal.ca.us.na (AMPR)  
Post Office Box Box 281107      San Francisco, California 94128 USA

-----  
Date: Tue, 27 Jul 93 15:21:45 EST

From: pa.dec.com!nl.nuwc.navy.mil:greg%willie.nl.nuwc.navy.mil!@decwrl.dec.com

Subject: Schematic for RFC 2-317 wanted...

To: info-hams@ucsd.edu

I have recently purchased a used RF Concepts 2-317 amp without any documentation. The guy who sold it to me was saying that the manual for it was just a couple pages stapled together and a schematic diagram. I was wondering if anyone out there could make me a photocopy of it if it is only a few sheets. I will gladly send a SASE as well.  
Thanks....

Greg

-----  
Date: Tue, 27 Jul 1993 18:48:09 GMT  
From: pravda.sdsc.edu!news.cerf.net!usc!sdd.hp.com!col.hp.com!news.dtc.hp.com!  
srngenprp!alanb@network.ucsd.edu  
Subject: TS50 Illegal!  
To: info-hams@ucsd.edu

Gary Coffman (gary@ke4zv.uucp) wrote:

: > Assuming 100% modulation, 40 watts carrier would be 60 watts PEP.  
: >  
: alanb@sr.hp.com (Alan Bloom) wrote:  
: > Assuming 100% modulation, 40 watts carrier would be 160 watts PEP.  
: > PEP power is 4 times the carrier (i.e. twice the voltage) for 100%  
: > modulation AM.  
: >  
: > Gary was confused by the fact that 100% modulating a 40 watt carrier  
: > gives you 20 watts of sidebands, for a total AVERAGE power of 60 watts.  
: > The peak envelope power is, however, 160W.

: Err, ah, I may still be confused, but I think this is wrong too.

[Equations deleted]

: Now PEP is conventionally defined as peak voltage times peak current,  
: and should be expressed in VA, not watts, since the two may not be in  
: phase.

PEP is defined as the power transferred to the load (antenna) at the peak of the modulation waveform. It is expressed in watts.

: Whew! I thought this was going to be simple.

It IS simple. Let's say your transmitter is putting out an unmodulated carrier of 10V RMS into a 50-ohm resistive load.  $\text{Power} = E^2 / R = 2 \text{ Watts}$ . With 100% modulation, the RF voltage varies between 0V on negative modulation peaks, to 20V on positive peaks. So on positive

peaks, the power is  $20^2 / 50 = 8$  Watts.

100% modulated AM has a 4/1 peak (PEP) to carrier power ratio.

AL N1AL

-----  
Date: 27 Jul 93 11:09:45 GMT  
From: ddsww1!indep1!clifto@uunet.uu.net  
To: info-hams@ucsd.edu

References <23JUL199307025189@nssdca.gsfc.nasa.gov>,  
<CAq72H.4r0@dartvax.dartmouth.edu>, <29847@ksr.com>  
Subject : Re: STILL waiting for your license? Read this and weep!

In article <29847@ksr.com> jfw@ksr.com (Richard Milhouse Nixon) writes:  
>However, the FCC is not entirely backward; they \_have\_ issued preliminary  
>regulations to allow electronic filing, contingent (largely) on a federally-  
>approved standard for digital signatures and other authentication. That is  
>\_not\_ a simple problem, and it is one that the people out there in the cold,  
>cruel, real world take seriously.

The non-simple problem is getting the Gov't to approve a standard, NOT  
finding a good standard for digital signature verification. Look at  
sci.crypt to see mentions of several very secure methods.

--  
+-----+  
| Cliff Sharp | clifto@indep1.chi.il.us OR clifto@indep1.uucp |  
| WA9PDM | Use whichever one works |  
+-----+

-----  
Date: 27 Jul 93 10:58:52 GMT  
From: ddsww1!indep1!clifto@uunet.uu.net  
To: info-hams@ucsd.edu

References <2372@indep1.UUCP>, <1993Jul23.161208.13275@ke4zv.uucp>,  
<25148@acorn.co.uk>1  
Subject : Re: SMD rework was(Re: Alinco DJ-580 Intermod Reduction)

In article <25148@acorn.co.uk> agodwin@acorn.co.uk (Adrian Godwin) writes:  
>I've tried most of the rework techniques on through-hole boards that  
>have been mentioned in this thread, and been fairly successful.  
>However, I've always had problems with connectors, especially those  
>(like DIN 41612 connectors, and IDC headers) that have a large number  
>of square posts that fit closely in the holes.

>I wonder if anyone's found a successful technique for removing them,  
>especially without damaging the PCB ?

I use a solder sucker, not braid, so the following is based on that...

I use a reasonably low-wattage iron (35W) with a chisel tip. I heat the connection until I see the solder flowing, then wiggle the post/IC pin/whatever until it appears to be free (i.e., all the solder is liquid, including that inside the via and any on the other side of the board). I then place the solder sucker right on top of the connection AND the tip of the iron, and just at the moment I push the plunger release button I remove the tip of the iron (note I haven't stopped wiggling the post until that point, you saw that, right? :-). Then if the board is really fragile or the job is really critical, I immediately grab the post with needle-nose pliers and wiggle a bit; if it's not free, I reheat it for a few seconds and wiggle again, and repeat as necessary.

Assembling a Wersi organ some time back, I decided to put all the G-64 connectors on all the boards at once to get rid of the boring, repetitive part. I put them ALL on the wrong side of the boards and had to unsolder every last one. Out of several hundred such connections, I lost two vias, and those mostly out of not following my own directions.

--

```
+-----+
|  Cliff Sharp  |      clifto@indep1.chi.il.us   OR  clifto@indep1.uucp   |
|   WA9PDM     |      Use whichever one works                               |
+-----+
```

-----  
Date: 27 Jul 93 04:30:04 GMT  
From: anomaly.sbs.com!kd1nr!system@uunet.uu.net  
To: info-hams@ucsd.edu

References <1993Jul20.190859.23355@random.ccs.northeastern.edu>,  
<CAq31s.1lt@goldmine.irony.com>, <CArvqp.92y@odin.corp.sgi.com>  
Subject : Re: Broadcasting...

adams@chuck.dallas.sgi.com (Charles Adams) writes:

```
> In article <CAq31s.1lt@goldmine.irony.com>, elt@goldmine.irony.com (Ed Tayche
> rt) ...stuff deleted...
>
> |> Anyway, the FCC is pretty specific (unless they're being purposely obscure
> !)
```

> |> about what we can and can not do. Anyway, broadcasting \_as defined\_ is  
> |> illegal. There are plenty of one-way moded that are not, including all  
> |> kinds of fun things like remote control, telecommand, telemetry...

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>                                     ^^^^^^^^^^^^^^^^^
```

>  
> this is interesting. how about r/c planes on 6 meters? are they illegal?  
> a long long time ago i used to do this....

Yup, it's still legal.

#### Subpart C - Special Operations

##### 97.215 Remote control of model craft.

An amateur station transmitting signals to control a model craft may be operated as follows:

(a) The station identification procedure is not required for transmissions directed only to the model craft, provided that a label indicating the station call sign and the stations licensee's name and address is affixed to the station transmitter.

(b) The control signals are not considered codes or ciphers intended to obscure the meaning of communication.

(c) The transmitter power must not exceed 1W.

Hope that helps....

Tony

```
-----
      o      o Tony Pelliccio, KD1NR, Control Op 441.750+, ARRL VE
        \    / system @ garlic.sbs.com                      Soon W5YI VE
         \__/_/
          (oo) Cow humor. Sort of like the Far Side.
    /|  ____ \
  / | {MTV} || MooTV - Rockin' Bumpin' and Funkin' into the 90's
* || {____} ||
  ||-----|| (And people thought my last .sig was long, ha!)
  ^^      ^^
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End of Info-Hams Digest V93 #910

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